Incentive and Initiative Funding Concepts for Consideration by the Higher Education Advisory Committee

Separate from the resources provided by ***base operations and instructional funding*** (base adequacy) for all four-year and two-year colleges and universities, the current thinking is that performance funding should include a number of system-wide incentives and initiatives to encourage desired outcomes. In keeping with admonitions from Dennis Jones, of NCHEMS, in an earlier AC meeting, the concepts presented in this brief paper are guided by a desire to keep incentives and measures simple, straightforward, limited in number and focused on ***the*** most important Commonwealth higher education goals.

Incentive funding incorporates enrollment growth and is accomplished through the allocation of "per student" funding as explained below. Other incentives associated with increased degree production, accelerated time-to-degree, and increased STEM-H degree production are addressed by the allocation of an incentive pool based on institutional performance. Dr. Jones, in his presentation to the AC, recommended that the four-year and two-year institutions, given their differences in mission, should have distinct incentive funding and performance measures. Consequently, ***two separate incentive funding pools and performance measures*** are suggested for the four-year colleges and universities and the two-year institutions. Of the total general funds appropriated in 2011, 27.14 percent were allocated to the two-year colleges and universities. The proposed incentive funding pool will be distributed in the same proportion.

Rather than being eligible for the incentive funding, it is suggested that laboratory start-up costs to support an enhanced research agenda, year-round use of facilities, course redesign and other instructional technology applications might best be considered as proposed ***institutional initiatives*** advanced in the college and university six-year plans. Institutions submitting ***joint initiatives*** with the intent of partnering and sharing resources may have their proposals considered in this performance funding category. Funded initiatives will be required to have associated performance measures and/or standards.

To summarize, those institutions that demonstrate enrollment growth and meet qualifying criteria, will receive the proposed per-student ***enrollment growth funding***; all institutions would receive (1) ***base operations and instructional funding***, and, would also be eligible for (2***) incentive funding***, divided into two pools, one for four-year and one for two-year institutions; and (3) ***initiative funding*** based on six-year plan initiative requests to support Commonwealth goals.

Incentive Funding for Four-Year Institutions

I. Enrollment Growth:
All four-year institutions with a six-year graduation rate, calculated as the average of the previous three years, that meets or exceeds seventy percent and all others that maintained or improved their six-year graduation rate, calculated as the average of the previous three years, will receive the TAG per student funding for the applicable year ($2,650 for FY12 and FY13) for every in-state FTE student enrolled beyond the FTE enrollment of the previous year.

Institutions will receive 150 percent of the enrollment growth incentive for the portion of the enrollment growth that is anticipated to pursue degrees in the STEM-H fields, based on actual bachelor's degree award history. For example, if enrollment growth of 100 students is anticipated, and twenty-five percent of the bachelor's degrees awarded in the previous year were in STEM-H fields, the institution would receive $2,650 for each of the seventy-five new students, and $3,975 for each of the twenty-five new students.

To avoid misallocation of the enrollment growth incentive due to unrealized planned enrollment, it is proposed that all enrollment growth incentive funds be appropriated to a central account for distribution once enrollments are verified.

It is expected that increased funding for the enrollment growth incentive will parallel future increases in TAG. Institutions that do not qualify for the per student enrollment growth incentive may request additional funding under "Initiatives" to promote increased retention and graduation rates.

Performance Measure:
This measure will be reported at the institutional and system level.

1. Incremental annual growth in the number of undergraduate Virginians enrolled in colleges and universities.

II. Degree Production Incentive:
Once a pool of degree production incentive funds for four-year institutions is determined, the total points will be applied to that number to produce a single point "value." Funds will then be distributed to each institution based on their accrued point total.

This incentive will reward actual degree production as opposed to prospective awards. For future years, the three-year measurement period will be considered to be a rolling three years, that is, as the most recent year is added, one year will be dropped from the calculation. The value of a "point" will vary from year to year based on the size of the available incentive fund pool. Three-year averages for degree attainment and

progression are weighted such that figures for 2009-10 are multiplied by a factor of three, 2008-09 by a factor of two, and 2007-08 by a factor of one.

Four-year institution's "points" will be assigned as follows:

1. Five points will be assigned for every bachelor's degree awarded by that institution for each year from 2007-08 through 2009-10.

2. Three points will be assigned for every bachelor's degree awarded by that institution in SCHEV approved STEM and Health (STEM-H) fields of study for each year from 2007-08 through 2009-10.

3. Two points will be assigned for every bachelor's degree awarded by that institution that was achieved in four years or less for each year from 2007-08 through 2009-10.

4. One point will be assigned for every bachelor's degree awarded by that institution for each student classified as an under-represented student for each year from 2007-08 through 2009-10. Under-represented is subdivided into three categories: student of color, Pell grant recipient, and student over age 25 at time of entry.

5. One point will also be assigned for every graduate degree awarded by that institution in a STEM-H field for each year from 2007-08 through 2009-10.

6. Ten (10) percent of the points accumulated under 1 through 5 above would be assigned (added to) an institution which had both a six-year graduation rate that exceeded its state-approved (salary) peer institution average and Total Public Revenues (unrestricted state and student tuition and fees) Per Degree that was below its state-approved (salary) peer institutions.

7. Ten (10) percent of the points accumulated under 1 through 5 above would be unassigned (subtracted from) an institution which had both a six-year graduation rate that was below its state-approved (salary) peer institution average and Total Public Revenues (unrestricted state and student tuition and fees) Per Degree that was above its state-approved (salary) peer institutions.

8. Institutions exceeding average peer performance in one measure (referring to #6 and #7 above) but falling below average peer performance in the other measure will have no change in points accumulated.

Performance Measures:

All of these measures will be reported at the institutional and system level.

1. Incremental annual growth in the number of bachelor's, and graduate STEM-H degrees awarded.

2. Incremental annual growth in the number of under-represented students awarded bachelor's degrees.

3. Incremental annual growth in the total number of bachelor's degrees awarded.

4. Incremental annual growth in the total number of bachelor's degrees awarded in four years or less.

5. Six-year graduation rate and public revenues per degree weighted by STEM and Health median earnings.

III. Progression To Degree Incentive

Institutions will receive one point for each under-represented student who progresses from one academic level to the next as reported by SCHEV. Points are awarded to recognize and encourage the progress-to-degree of under-represented students at all four-year institutions. The value of the point will vary from year to year based on the size of the available incentive fund pool. The year immediately preceding the year in which the funds are to be allocated will be used as the basis for degree progression calculations.

Four-year institution's "points" will be assigned as follows:

1. One point will be assigned for each under-represented student who progresses to the next level in the measurement year.

Performance Measure:

This measure will be reported at the institutional and system level.

1. Incremental annual growth in the total number of under-represented students who progress from one level to the next in each of the four-year institutions.

IV. STEM-H Incentive

Distribution of Student Financial Aid

The Degree Production Incentive provides encouragement to institutions to increase the number of STEM-H degrees awarded. To supplement this incentive, consideration should be given to the modification of current Commonwealth and institutional practices for the distribution of student aid, including grants, scholarships and loans. The possibility of partial tuition waivers might also be explored.

Summer Internships in STEM-H
Given that the best motivator in a student's selection of field of study is likely the prospect of a job, it is proposed that the Commonwealth establish a Governor's Internship Grant Program to support summer internships in the summers after the sophomore and junior year for students in STEM-H fields. The Virginia Space Grant Intern Program may be an instructive model for planning this effort.

The program would be structured as a Commonwealth of Virginia/Virginia Employer partnership in which the student stipend for the summer would be equally split-funded between the Commonwealth and the employer. A target of 500 internships per summer is envisioned. The anticipated cost to staff and administer the Governor's Internship Grant program is proposed to be funded by the participating institutions**.**

A more detailed description of this proposal is provided as Appendix A to this report.

Incentive Funding for Two-Year Institutions

I. Enrollment Growth Incentive
The VCCS and Richard Bland College will receive $1,650 for the applicable year (FY12 and FY13) for every in-state FTE student enrolled beyond the FTE enrollment of the previous year. The VCCS will also receive 150 percent of the enrollment growth incentive for the portion of the enrollment growth that is anticipated to pursue associate's degrees in the STEM-H fields, based on actual associate's degree award history. For example, if enrollment growth of 100 students is anticipated, and twenty-five percent of the associate's degrees awarded in the previous year were in STEM-H fields, the college would receive $1,650 for each of the seventy-five new students, and $2,475 for each of the twenty-five new students.

The enrollment growth work group is working on the methodology for timing, reporting, etc.

Performance Measure:
This measure will be reported at the system level.

1. Incremental annual growth in the number of Virginians enrolled in the two-year colleges.

II. Degree Production Incentive
The Community College System and Richard Bland College will have a pool of funds for degree production incentives separate from the four-year institutions. Total 2011-12

general fund appropriations to the VCCS and Richard Bland College total $326,143,754 or 27.14 percent of the total higher education general fund appropriation of $1,201,919,488.The VCCS/RBC degree production incentive pool will be 27.14 percent of the total funding made available to higher education for this incentive.

Although it is intended that the degree production incentives for the VCCS and RBC parallel those used for the four-year colleges and universities, they need to be tailored to the missions of the two-year colleges. Working with Chancellor DuBois and President McNeer, the degree production incentives will be identified and detailed by the October 28 Higher Education Advisory Committee meeting.

Performance Measures:

III. Progression to Degree Incentive

Although it is intended that the progression to degree incentives for the VCCS and RBC parallel those used for the four-year colleges and universities, they need to be tailored to the missions of the two-year colleges. Working with Chancellor DuBois and President McNeer, the progression to degree incentives will be identified and detailed by the October 28 Higher Education Advisory Committee meeting.

IV. STEM-H Incentive

The Degree Production Incentive provides encouragement to institutions to increase the number of STEM-H degrees/certificates awarded. To supplement this incentive, consideration should be given to the modification of current Commonwealth and institutional practices for the distribution of student aid, including grants, scholarships and loans. The possibility of partial tuition waivers might also be explored. It might prove useful to expand CTG (transfer grant) preference areas to align with STEM-H.

Appendix A

A Proposed Summer Internships Program in STEM-H

Given that the best motivator in a student's selection of field of study is likely the prospect of a job, it is proposed that the Commonwealth establish a Governor's Internship Grant Program to support summer internships in the summers after the sophomore and junior year for students in STEM-H fields. The Virginia Space Grant Intern Program may be an instructive model for planning this effort.

The program would be structured as a Commonwealth of Virginia/Virginia Employer partnership in which the student stipend for the summer would be equally split-funded between the Commonwealth and the employer. A target of 500 internships per summer is envisioned.

Key Elements of the Governor's Internship Grant Program

Initially, the Governor's Internship Grant Program would be coordinated by a staff of three personnel who would be responsible for:

- identifying and securing the participation of business organizations in the Commonwealth committed to hiring, training, and evaluating their interns;
- communicating with STEM-H representatives and career services offices on the campuses of all four-year public universities in Virginia;
- developing effective marketing strategies and working with each of the campuses to promote internship grant opportunities and recruit STEM-H students;
- identifying and implementing an automated system for business organizations to post their internship listings and review student credentials; and,
- developing appropriate measures to track student and employer participation in the program, as well as assess clients' satisfaction and programmatic outcomes.

To qualify, business organizations would need to meet the following criteria:

- have a strong business presence in the Commonwealth of Virginia;
- Both large corporations and small businesses, as defined by the Small Business Administration's size standards, that can provide interns meaningful, career-related work experiences and opportunities to learn new skills will be eligible and to participate.

To qualify for internship stipends, students would need to meet the following criteria:

- be a resident of the Commonwealth of Virginia;
- be enrolled in one of the Commonwealth's four-year public colleges or universities;
- be enrolled in an academic program included in the STEM-H categories; and,

- academically, be a rising junior or rising senior in good standing at their institution.

Having met these qualifications, the business organizations would make all final decisions about which students were hired for internships.

Internship Compensation Model

According to the National Association of Colleges and Employers (NACE) *2011 Internship and Co-op Survey*, the average wage rate for interns at the bachelor degree level was $16.68 per hour (down slightly from $17.00 reported in 2010). Considering that this Governor's Internship Program proposes to provide internship stipends to undergraduate students enrolled in STEM-H programs who are rising juniors (3rd years) and rising seniors (4th years), a closer examination of the NACE survey reveals the following:

Average Intern Hourly Wage Rates – Bachelor's Degree – Juniors

Academic Major	Percentile 25	Mean	Percentile 75
Computer Science	16.00	17.85	19.26
Engineering	16.50	18.90	20.50
Health	15.68	18.68	20.00
Mathematics	15.72	18.50	20.50
Physical Sciences	16.50	18.64	20.00

Average Intern Hourly Wage Rates – Bachelor's Degree – Seniors

Academic Major	Percentile 25	Mean	Percentile 75
Computer Science	17.00	19.02	21.00
Engineering	17.00	20.19	22.00
Health	17.00	19.00	20.53
Mathematics	16.56	19.36	21.51
Physical Sciences	18.00	19.89	21.01

Based on the relative similarity among the rates for the STEM-H programs presented in the two tables above, and calculating modest increases in internship wages in Summer 2012, the draft recommendation is for the hourly wage rate for rising juniors to be $19.00 per hour, and the recommendation for the hourly wage rate for rising seniors to be $21.00 per hour. Assuming that the normal duration of internships is ten (10) weeks, this equates to grants of $7,600 for rising juniors and $8,400 for rising seniors.

If, for instance, 500 grants are funded, and 75% (375) are awarded to rising seniors and the remaining 25% (125) are awarded to rising juniors, the total funding would be $4,100,000; a cost that is proposed be shared equally between the Commonwealth and the qualifying business organization.

Projected Administrative Costs
The anticipated cost to operate the Governor's Internship Grant program outlined below is proposed to be funded by the participating institutions**.**

Personnel – This proposal recommends three staff members – director, associate/assistant director, and program manager.

Director -- $65,000 to $75,000 plus benefits – this person would provide strategic planning and program oversight; communicate programmatic goals to key constituents; would be expected to meet quantifiable goals with respect to the number of employers and students enrolled in the program; and would provide annual reports and assessments related to programmatic goals.

Associate/Assistant Director -- $50,000 to $60,000 plus benefits – this person would manage daily operations including automated systems; would assist in communications to constituents; would develop measures to track program activity and assess client satisfaction and achievement of outcomes; and would supervise the program manager.

Program Manager – $40,000 to $50,000 plus benefits – this person would be responsible for all business-related functions including accounting, financial management, purchasing and procurement, and any necessary human resources functions.

Automated Systems – Automated applicant tracking and referral systems allow business organizations to post and students to review internship listings; permit students to submit and employers to review application materials on-line; record key information related to participant activity, and provide a means for communicating information to all participants.

Symplicity Career Services and Campaign Manager – $25,000 – One of the more universally contracted applicant tracking systems used on college and university campuses, this set of software modules provides a full-service suite of customer relationship software to effectively manage recruiting, organizational outreach, and development.

Additional Overhead Costs – Given this would be a new initiative in the Commonwealth, in addition to staffing and the automated system identified above, there would be a need for office space, computers and other technical equipment, office and mobile telephones, and an operating budget that included significant travel funds for at least the first two/start-up years of the program.